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a step of ejecting onto the recording material the ink, said ink having a Ka value of a first value; and

a step of applying the processing liquid having a Ka value of a second value larger than the first value, onto the ink ejected on the recording material,

wherein the processing liquid is applied onto the recording material after a rapid swell start point is passes after penetration of the ink into the medium so that the processing liquid is overlapped with the ink ejected on the recording material.

2. (Not Amended Herein) A recording method comprising the steps of: ejecting onto a recording material ink having a Ka value not less than 1 $(\text{ml} \cdot \text{m}^{-2} \cdot \text{msec}^{-1/2})$; then

applying heat to the ink; and

applying to the ink a processing liquid having a Ka value not less than 1 $(\text{ml} \cdot \text{m}^{-2} \cdot \text{msec}^{-1/2})$.

3. (Not Amended Herein) A recording method comprising the steps of: ejecting to a recording material ink having a Ka value not more than 1 $(\text{ml} \cdot \text{m}^{-2} \cdot \text{msec}^{-1/2})$ and having a penetration property that increases with heat; then applying heat to the ink; and applying to the ink a processing liquid having a Ka value not less than 1 $(\text{ml} \cdot \text{m}^{-2} \cdot \text{msec}^{-1/2})$.

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4. (Twice Amended) An apparatus according to Claim 1, further comprising the step of applying heat to a reaction product of the ink and the processing liquid after said processing liquid applying step.

5. (Not Amended Herein) A recording method according to Claim 4, wherein the Ka value is not more than 5 (ml.m⁻².msec^{-1/2}).

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6. (Amended) A method according to Claim 1, wherein the ink contain pigment.

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7. (Twice Amended) A method according to Claim 1, wherein the ink includes a black ink and a color ink, the black ink having a Ka value of not more than 3 (ml.m⁻².msec^{-1/2}) and the color ink having a Ka value of not less than 5 (ml.m⁻².msec^{-1/2}), and after application of the processing liquid having a Ka value of not less than 5 (ml.m⁻².msec^{-1/2}), the color ink is ejected.

8. (Not Amended Herein) A recording method comprising the steps of:
depositing ink containing a coloring material having a polarity onto a recording material; and then

applying to the ink, a processing liquid having a polarity opposite from that of said coloring material after a rapid swell start point is after penetration of the ink onto the recording material, so that the coloring material in the ink is insolubilized by the processing liquid at least inside the recording material.

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9. (Twice Amended) A method according to Claim 1, wherein the ink and the processing liquid are ejected to the recording material by generating a bubble by application of thermal energy to the ink and to the processing liquid.

10. (Not Amended Herein) A recording apparatus comprising:
ink ejecting portion for ejecting onto a recording material ink having a Ka value of not more than 3 ($\text{ml} \cdot \text{m}^{-2} \cdot \text{msec}^{-1/2}$);
a processing-liquid ejecting portion for applying to the ink deposited on the recording material, a processing liquid having a Ka value of not less than 5 ($\text{ml} \cdot \text{m}^{-2} \cdot \text{msec}^{-1/2}$) to insolubilize a coloring material in the ink inside the recording material,
wherein the processing liquid is applied to the ink after the ink is deposited on the recording material after a rapid swell start point is passes after penetration of the ink into the medium.

11. (Not Amended Herein) A recording method according to Claim 1, wherein the Ka of the processing liquid is not less than 5 ($\text{ml} \cdot \text{m}^{-2} \cdot \text{msec}^{-1/2}$).

12. (Not Amended Herein) A recording method according to Claim 11, wherein the Ka of the ink is not more than 3 ($\text{ml} \cdot \text{m}^{-2} \cdot \text{msec}^{-1/2}$).

13. (Not Amended Herein) A recording method according to Claim 11, wherein the Ka of the ink is not more than 1 ($\text{ml} \cdot \text{m}^{-2} \cdot \text{msec}^{-1/2}$).